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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,208	04/22/2004	Todd A. Leonhardt	RHE-15250	9026

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EXAMINER

MAI, NGOCLAN THI

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/830,208

Applicant(s)

LEONHARDT ET AL.

Examiner

Ngoclan T. Mai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/20/04.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 9-15, 20, 22 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 16-19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-23 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/27/04, 7/8/04.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-8, 16-19, and 21, drawn to an alloy, classified in class 75, subclass 245.
 - II. Claims 9-15, 20 and 22-23, drawn to method of making, classified in class 419, subclass 1.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by either coating rhenium powder with liquid of metal compound selected from the group consisting of W, Mo, Ta, Ir, Ru, and Os or by forming a precipitate of Re compound and compound of the metal before consolidating, i.e., the product can be made by at least two different methods.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. Should applicant elected group II, this application contains claims directed to the following patentably distinct species of the claimed invention:

a) a method comprising coating a metal powder of Re with liquid of a compound selected from the group consisting of W, Mo, Ta, Ir, Ru and Os, drying the coated powder following by compressing and sintering recited in claims 9-15 and 22 and

b) a method comprising providing a precipitate comprising a Re compound and a compound of the metal selected from the group consisting of W, Mo, Ta, Ir, Ru and Os, following by compressing and sintering recited in claims 20 and 23.

7. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

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8. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

9. During a telephone conversation with applicant's attorney Randolph Digges on July 6, 2005 a provisional election was made without traverse to prosecute the invention of group I, claims 1-8, 16-19, and 21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 9-15 and 20 and 22-23 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

10. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claim 1, 5, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Foster, Jr, et al. (US 3,318,683).

Foster, Jr. et al. discloses alloy of refractory metal such as Re wherein all compositions of W can be alloyed with the Re. With that Foster Jr. et al. exemplifies Re alloying with 10-weight percent tungsten as recited in claim 1, see example 3. As for the limitation of the room temperature tensile strength and an elongation of the alloy recited in claim 1, it appears that the claimed property is material property; consequently, the properties as recited in the instant claim would have inherently possessed by the teachings of the cited reference. Therefore, the burden is on the applicant to prove that the product of the prior art does not necessarily or inherently possesses characteristics attributed to the claimed product. In re Spade, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990), In re Best, 195 USPQ 430 and MPEP § 2112.01.

Regarding claims 5 and 21, Foster, Jr. et al. discloses alloy of Re and 10-weight percent tungsten and alloy of Re and 5 w/o osmium, see examples 3 and 10, respectively. Foster Jr. et al further teaches that the alloy of refractory metal which is in powder form can be compacted into desired shape, see col. 1, lines 51-57 and col. 2, line 70 to col.2, line 5. Although the alloy of the refractory metal taught is not formed by coating Re powder with a liquid compound of tungsten, Ir or Os and drying the coated powder before compacting as recited in claim 5 and 21, there is no distinction between the claimed alloy and the alloy of refractory metal taught by Foster Jr. et al. Note that

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it has been established that a product by process claim is directed to the product per se, no matter how actually made, *In re Kirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Thorpe*, 227 USPQ 964 (CAFC 1985), which makes it clear that it is the patentability of the final product per se which must be determined in a product by process claim and not the patentability of the process. An old or obvious product produced by a new method is not patentable as a product, whether claimed in a product by process claims or not. Note that applicant has the burden of proof in such case. The claimed alloy reads on the alloy of the prior art.

13. Claims 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kubon et al. (US 6,060,829).

Kubon et al. discloses a Re-W wire consisting of Re and no more than 10 weight percent W, preferably no more than 5 weight percent, see col. 3, lines 23-31.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 2-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foster Jr. et al.

While Foster Jr. et al. does not specifically disclose tungsten in the ranges as recited in the claims, it would have been obvious to one of ordinary skill in the art to select any portion of range, including the claimed range, from the broader range disclosed by Foster Jr. et al. because Foster Jr. et al. finds that tungsten in the entire disclosed range can be alloyed with Re in powder form for used in compacted of various shape. --- Note: Even if a reference teaches a preferred range within a broader range, it still does not "teach away" from the claimed invention. See MPEP 2123.

16. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubon et al.

While Kubon et al. does not specifically disclose tungsten in the ranges as recited in the claims, it would have been obvious to one of ordinary skill in the art to select any portion of range, including the claimed range, from the broader range disclosed by Kubon. et al. because Kubon et al. finds that tungsten in any amount less than 5 percent by weight can be alloyed with Re in form of a wire for use to protect tungsten electrode rods from certain unwanted reaction.

17. Claims 1-8, 16-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bewlay et al. (US 6,162,552).

Bewlay et al discloses a rhenium based wire comprising rhenium alloy containing up to 11 weight percent tungsten, col. 3, lines 57-62.

Bewlay et al also teaches the rhenium based can be in form of a sintered layer formed by cold isostatic pressing and sintering rhenium-tungsten alloy powder, col. 4,

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line 47 to col. 5, line 3. While Kubon et al. does not specifically disclose tungsten in the ranges as recited in the claims, it would have been obvious to one of ordinary skill in the art to select any portion of range, including the claimed range, from the broader range disclosed by Bewlay et al. because Bewlay et al. finds that tungsten in any amount less than 11 percent by weight can be alloyed with Re. As for the limitation of the room temperature tensile strength and an elongation of the alloy recited in claim 1, it appears that the claimed property is material property; consequently, the properties as recited in the instant claim would have inherently possessed by the teachings of the cited reference. Therefore, the burden is on the applicant to prove that the product of the prior art does not necessarily or inherently possesses characteristics attributed to the claimed product. In re Spade, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990), In re Best, 195 USPQ 430 and MPEP § 2112.01.

Although the alloy of the refractory metal taught is not formed by coating Re powder with a liquid compound of tungsten and drying the coated powder before compacting as recited in claim 5 and 21, there is no distinction between the claimed alloy and the alloy of refractory metal taught by Bewlay et al. Note that it has been established that a product by process claim is directed to the product per se, no matter how actually made, *In re Kirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Thorpe*, 227 USPQ 964 (CAFC 1985), which makes it clear that it is the patentability of the final product per se which must be determined in a product by process claim and not the patentability of the process. An old or obvious product produced by a new method is not patentable as a product, whether claimed in a product by process claims or not.


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Note that applicant has the burden of proof in such case. The claimed alloy reads on the alloy of the prior art.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoclan T. Mai whose telephone number is (571) 272-1246. The examiner can normally be reached on 9:30-6:00 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ngoclan T. Mai
Primary Examiner
Art Unit 1742

n.m.